

IV. AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A key pad comprising resin key tops on a key sheet, wherein the resin key tops ~~have in their~~ having side surfaces clearance portions ~~of a configuration in conformity with an outer configuration of~~ configured to avoid contact with interference members, at least ~~an~~ upper portions of which are situated in displacement regions at bottom surface edges of the resin key tops allowing their displacement when they are depressed.

2. (ORIGINAL) A key pad according to claim 1, wherein the interference member is a protrusion protruding from a general surface of a surface of the key sheet.

3. (ORIGINAL) A key pad according to claim 2, wherein the protrusion is one of a circuit component connected to the substrate circuit in a protruding state with respect to a substrate surface opposed to a key sheet back surface and an accommodating portion of the circuit component formed in the key sheet.

4. (ORIGINAL) A key pad according to claim 1, wherein the interference member is a leg portion floatingly supporting the resin key top mounting portion of the key sheet so as to be capable of moving toward and away from a substrate surface opposed to the key sheet back surface.

5. (ORIGINAL) A key pad according to claim 1, wherein the resin key tops have on their side surfaces outwardly protruding flange portions and have clearance portions formed therein.

6. (ORIGINAL) A key pad according to claim 2, wherein the resin key tops have on their side surfaces outwardly protruding flange portions and have clearance portions formed therein.

7. (ORIGINAL) A key pad according to claim 3, wherein the resin key tops have on their side surfaces outwardly protruding flange portions and have clearance portions formed therein.

8. (ORIGINAL) A key pad according to claim 4, wherein the resin key tops have on their side surfaces outwardly protruding flange portions and have clearance portions formed therein.

9. (CURRENTLY AMENDED) A resin key top injection mold comprising a key top forming portion in a resin key top molding cavity, wherein the cavity is provided with: a key top forming portion; a runner portion communicating with the key top forming portion; and a resin relief protrusion, and wherein the resin relief protrusion has a molding surface expanded at an entrance of the key top forming portion and the runner portion toward the key top forming portion, with the molding portion being smaller in width than the entrance and of a configuration in conformity with an outer configuration of an interference member at least an upper portion of which is situated in a displacement region of a bottom surface edge of the resin key top, which is to be displaced upon depression and a runner portion communicating with the key top forming portion, the key top forming portion and the runner portion defining a cavity,

wherein the resin key top injection mold further comprises a resin relief protrusion formed at an entrance that serves as a boundary between the key top forming portion and the runner portion and protruding from a surface of the cavity, the resin relief protrusion being smaller in width than the entrance and having a molding surface that is convex toward the key top forming portion, and

wherein the molding surface has a configuration in conformity with an outer configuration of an interference member, the interference member having at least its upper portion situated within a displacement region where a bottom surface edge of the resin key top undergoes displacement upon depression.

10. (ORIGINAL) A resin key top injection mold according to claim 9, wherein the resin relief protrusion is formed in a pin member protruding in the cavity at the entrance, and pin holes allowing detachable attachment of a plurality of pin members are formed.

11. (ORIGINAL) A resin key top injection mold according to claim 9, wherein the entrance of the resin key top injection mold is wider on the key top forming portion side and narrower on the runner portion side.

12. (ORIGINAL) A resin key top injection mold according to claim 9, wherein an air vent portion communicating with the runner portion is formed.

13. (CURRENTLY AMENDED) A resin key top manufacturing method in which a molten resin is poured into a ~~key top forming portion of a cavity formed in a resin key top injection mold and is allowed to solidify therein, comprising the steps of: forming at least one of an upstream side runner portion existing between a resin injection hole and a key top forming portion and a downstream side runner portion existing between the key top forming portion and an air vent portion, and a resin relief protrusion having a molding surface expanded at the entrance of the key top forming portion and the runner portion toward the key top forming portion, with the molding surface being narrower than the entrance and of a configuration in conformity with an outer configuration of an interference member at least upper portion of which is situated in a displacement region at a bottom surface edge of a resin key top to be displaced upon depressing operation, wherein a process is executed in which a molten resin is poured into this cavity, allowed to solidify therein, and released therefrom to thereby obtain a molded piece, and wherein a process is executed in which a portion corresponding to the runner portion is removed from the molded piece, thereby providing a resin key top having on its side surface a clearance portion of a configuration in conformity with an outer configuration of an interference member at least an upper portion of which is situated in a displacement region of a bottom surface edge of the resin key top to be displaced upon depressing operation~~ cavity of a resin key top injection mold having a key top forming portion, the method comprising the steps of:

obtaining a molded piece by pouring a molten resin into the cavity of the resin key top injection mold, allowing the molten resin to solidify to obtain a solidified resin, and releasing the solidified resin from the resin key top injection mold, the cavity having formed therein:

at least one of an upstream side runner portion situated between a resin injection hole and the key top forming portion and a downstream side runner portion situated between the key top forming portion and an air vent portion; and
a resin relief protrusion formed at an entrance that serves as a boundary between the key top forming portion and the at least one of the upstream side runner portion and the downstream side runner portion, the resin relief protrusion being smaller in width than the entrance, having a molding surface that is convex toward the key top forming portion, and having a configuration in conformity with an outer configuration of an interference member, the interference member having at least its upper portion situated within a displacement region where a bottom surface edge of the resin key top undergoes displacement upon depression;
and

forming the resin key top having a clearance portion formed in a side surface thereof by removing the upstream side runner portion from the molded piece, the clearance portion having a configuration in conformity with outer configuration of an interference member that has at least its upper portion situated within the displacement region where the bottom surface edge of the resin key top undergoes displacement upon depression.

14. (ORIGINAL) A resin key top manufacturing method according to claim 13, wherein the resin key top injection mold is used, which has the resin relief protrusion being formed in a pin member protruding in the cavity at the entrance of the key top forming portion and the runner portion, and has pin holes allowing detachable attachment of a plurality of pin members being formed.

15. (ORIGINAL) A resin key top manufacturing method according to claim 13, wherein the resin key top injection mold is used, which has the entrance of the resin key top injection mold being wider on the key top forming portion side and narrower on the runner portion side.

16. (ORIGINAL) A resin key top manufacturing method according to claim 13, wherein the resin key top injection mold is used, which has the air vent portion communicating with the runner portion being formed.

17. (NEW) A key pad according to claim 1, wherein the clearance portions are of a configuration in conformity with an outer configuration of the interference members.

18. (NEW) A key pad according to claim 1, wherein the clearance portions are of a configuration in which the wall thickness is reduced entirely along a height direction of the portion of the resin key top where it is formed.

19. (NEW) A key pad according to claim 1, wherein the clearance portions are of a configuration in which the wall thickness is reduced only in a lower portion along a height direction thereof.